AMENDMENTS TO THE CLAIMS:

Please cancel claim 57 without prejudice or disclaimer.

Claims 1 - 16. (Canceled)

Claim 17. (Currently amended) A method for producing a group III nitride compound semiconductor light-emitting device comprising:

producing an emission layer comprising a multi quantum well structure (MQW) with well layers and barrier layers;

doping donor impurity into a first well layer and doping acceptor impurity into a second well layer adjacent to said first well layer in a producing process of said multi quantum well structure; and

forming a barrier layer between said first and second well layers without doping, said barrier layer having a bandgap which is greater than a bandgap of said first and second well layers.

Claim 18. (Previously presented) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, further comprising:

producing a double-hetero junction structure in which said emission layer is sandwiched between adjacent layers.

Claim 19. (Original) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 18, wherein said emission layer comprises aluminum gallium indium nitride satisfying the formula $Al_xGa_yIn_{1-x-y}N$, inclusive of x=0, y=0, and x=y=0.

Claim 20. (Canceled)

Claim 21. (Previously presented) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said barrier layers

comprise a thickness in a range from 50 A to 500 A.

Claim 22. (Canceled)

Claim 23. (Previously presented) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said first well layer and said second well layer comprise a thickness in a range of 50 A to 500 A.

Clam 24. (Original) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said emission layer is doped with a concentration of magnesium (Mg) ranging from $1 \times 10^{19}/cm^3$ to $1 \times 10^{21}/cm^3$ and exhibits p-type conduction.

Claim 25. (Original) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said acceptor impurity is selected from the group comprising cadmium (Cd), zinc (Zn), beryllium (Be), and calcium, (Ca).

Claim 26. (Original) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said donor impurity is selected from the group comprising silicon (Si), germanium (Ge), tellurium (Te), and sulfur (S).

Claim 27 - 55. (Canceled)

Claim 56. (Previously presented) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said first well layer comprises a plurality of first well layers, said second well layer comprises a plurality of second well layers, and said barrier layer comprises a plurality of barrier layers.

Claim 57. (Canceled)

Claim 58. (Previously presented) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said barrier layer separates said first and second well layers.

Claim 59. (Previously presented) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, wherein said barrier layer is bounded on a side thereof by said first well layer and on another side thereof by said second well layer.

Claim 60. (Previously presented) A method for producing a group III nitride compound semiconductor light-emitting device according to claim 17, further comprising:

forming an n-type clad layer on one side of said MQW structure; and

forming a p-type clad layer on another side of said MQW structure which is opposite to said n-type clad layer.

Claim 61. (Currently amended) A method of forming a multi quantum well structure (MQW) for an emission layer of a light-emitting device, comprising:

forming an acceptor-doped well layer and a donor-doped well layer; and

forming an undoped barrier layer between said acceptor-doped well layer and said donor-doped well layer, said barrier layer having a bandgap which is greater than a bandgap of said first and second well layers.

Claim 62. (Previously presented) A method of forming a multi quantum well structure (MQW) for an emission layer of a light-emitting device according to claim 61, wherein said acceptor-doped well layer comprises a plurality of acceptor-doped well layers, said donor-doped well layer comprises a plurality of donor-doped well layers, and said undoped barrier layer comprises a plurality of undoped barrier layers.

Claim 63. (Previously presented) A method of forming a multi quantum well structure (MQW) for an emission layer of a light-emitting device according to claim 61, wherein said forming said undoped barrier layer comprises forming said undoped barrier layer between said acceptor-doped well layer and said donor-doped well layer.

Claim 64. (Previously presented) A method of forming a multi quantum well structure (MQW) for an emission layer of a light-emitting device according to claim 61, wherein said undoped barrier layer separates said acceptor-doped well layer and said donor-doped well layer.

Claim 65. (Previously presented) A method of forming a multi quantum well structure (MQW) for an emission layer of a light-emitting device, according to claim 61, wherein said barrier layer is bounded on a side thereof by said first well layer and on another side thereof by said second well layer.